Z230 PE Management Workstation

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BOSCH
Invented for life

- High-end workstation with latest generation Intel Core i7 quad-core processor
- Dual-monitor support (NVIDIA Quadro K600, 1 GB graphics card)
- Protected by HP Services, including a 3 years Next Business Day on-site support

This HP Z230 Small Form Factor (SFF) management workstation with workstation-class reliability designed for heavy 24 x 7 x 365 workloads, delivers next-generation processor and graphics visualization for the Bosch video-oriented applications. The capable Z230 SFF platform is ideal where a small footprint and quiet operation is of importance.
Engineered to impress, the redesigned HP Z230 SFF workstation provides the capability and flexibility you demand in a 57% smaller form factor than the tower. With the built-in NVIDIA K600 graphics card you can realize impressive video performance supported by the latest Intel Core i7 generation:

- Intel Core i7-4770 processor (3.40 GHz, 84 W, 8 MB Cache, 1600 MHz memory speed, Quad-Core, HT†; with Intel Turbo Boost technology up to 3.90 GHz)
- 8 GB (2 x 4 GB) DDR3 1600 non-ECC unbuffered RAM

Save energy with HP ENERGY STAR qualified configuration including a 92% efficient power supply. ENERGY STAR qualified configurations of this product are in compliance with the IEEE 1680 (EPEAT) standard at the Gold level where HP registers workstation products.
HP Z230 SFF is a workstation solution based on the Intel C226 chipset offering future expandability.

The small form factor NVIDIA Quadro K600 (1 GB) 3D graphics card supported by the high-speed i7 processor ensures high performance and resolution for fast presentation of displayed video data.
With a smart new chassis it is easy to access—both inside and out with a tool-free chassis and integrated USB ports: 2 x USB 3.0 and 2 x USB 2.0 on the front side and 2 x USB 3.0 and 4 x USB 2.0 on the rear side. The convertible minitower chassis allows for minitower or desktop orientation.

System overview

Z230 PE Management Workstation is the high-end workstation suitable for running the security systems software applications offered by Bosch on a small footprint.
Please refer to the respective application data sheets to get detailed information.
Latest Intel Core i7 family, including:

- Intel Hyper-Threading technology brings high-performance applications into mainstream computing optimized for a new generation multi-core processor architecture
- Intel vPro technology for maximized, hardware-assisted security and manageability

- Intel Turbo Boost technology. Turbo Boost stepping occurs in 100 MHz increments and depends on the number of active cores

Certifications and approvals

RoHS	Compliant with the Restrictions of Hazardous Substances (RoHS) directive–2002/95/EC and 2011/65/EU
WEEE	Designed to comply with the Waste Electrical and Electronic Equipment (WEEE) directive–2002/96/EC
ISO 11469 ISO 1043	Plastic parts used in the product weighing over 25 g are marked per ISO 11469 and ISO 1043
	Contains 0% recycled materials (by weight)
	Product is >90% recyclable when properly disposed of at end-of-life
Batteries	The battery in this product complies with EU directive 2006/66/EC Battery size: CR2032 (coin cell) Battery type: Lithium Metal
Eco-Label certifications & declarations	This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks: • ENERGY STAR (energy-saving features available on selected configurations – Windows only) • US Federal Energy Management Program (FEMP) • China Energy Conservation Program (CECP) • IT ECO declaration

Approvals

Region	Certification	
Europe	CE	Z230 Declaration of Conformity

Installation/configuration notes

This management workstation comes in three standard localizations:
MHW-WZ2R3-PEDE German localization/keyboard
MHW-WZ2R3-PEUK British English localization/keyboard
MHW-WZ2R3-PERU Russian localization/keyboard
Additional optional keyboards listed under **Ordering Information** are available.

Notice
The Bosch management workstation provides a MUI (Multilingual User Interface). Select the language of the workstation with the pre-installed MUI during initial installation.
After initial installation the language selected can not be changed!

Parts included

Quantity	Components
1	HP Z230 SFF Workstation
1	• HP Z230 SFF 240 W, 92% efficient chassis
1	• 500 GB 7200 RPM SATA 6G, 1st HDD
1	• HP USB standard keyboard
1	• HP USB optical scroll mouse
1	• HP 16X DVD± RW SuperMulti SATA
1	• Intel Core i7-4770 3.4 GHz (up to 3.9 GHz) 8 MB 84 W Intel HD graphics 4600 4C HT CPU
1	• 8 GB (2 x 4 GB) DDR3-1600 nECC unbuffered RAM
1	• NVIDIA Quadro K600 1 GB DL-DVI(I)+DP, HP DisplayPort to Dual Link DVI adapter, HP DisplayPort to DVI-D adapter
	• HP serial port adapter kit
1	Microsoft Windows 7 Professional Edition, 64-bit OS
1	HP 3-year Next Business Day on-site hardware support

Technical specifications

Electrical	
Power supply	240 W, wide ranging, Active Power Factor Correction, 92% efficient
Operating voltage range	90 to 269 VAC
Rated voltage range	100 to 240 VAC
Rated line frequency	50/60 Hz
Operating line frequency range	47 to 63 Hz
Rated input current	4 A at 100 to 240 V
Power consumption in sleep mode (defined by ENERGY STAR)—suspend to RAM (S3) (instantly available PC)	<2 W in S5- Power Off (with Wake-on-LAN disabled)
Heat dissipation (configuration and software dependent)	444 BTU/h typical (112 kcal/h)
	890 BTU/h max (224 kcal/h)
Power supply fan	70 x 25 mm variable speed
ENERGY STAR qualified	Yes
ErP Lot 6- Tier 1 Compliance @ 230 V (<1 W in S5- Power Off)	Yes
ErP Lot 6- Tier 2 Compliance @ 230 V (<0.5 W in S5- Power Off)	Yes

Mechanical	
Form factor	Small Form Factor
Chassis dimensions (H x W x D) Minitower or desktop orientation	Standard desktop orientation: 100 x 337 x 384 mm (3.95 x 13.3 x 15.1 in) Optional SFF tower orientation (excluding stand dimension): 337 x 100 x 384 mm (13.3 x 3.95 x 15.1 in)
Weight	Typical weight: 7.2 kg (15.87 lbs) Shipping weight: 9.8 kg (21.6 lbs)

Environmental	
Temperature	
• operating	5 °C to 35 °C (40 °F to 95 °F)
• non-operating	-40 °C to 60 °C (-40 °F to 140 °F)
Humidity	
• operating	8 to 85%
• non-operating	8 to 90%
Maximum altitude (non-pressurized)	
• operating	3,000 m (10,000 feet)
• non-operating	9,100 m (30,000 feet)

Notes:

- General technical specifications for the workstation are provided in the HP Z230 QuickSpecs (DA-14630 Worldwide QuickSpecs - Version 6 – 11.1.2013).
- Configuration specifications are supplied in the Parts included section.

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Energy Star is a registered trademark of U.S. Environmental Protection Agency, all rights reserved.

Ordering information

Z230 PE Management Workstation DE
Workstation performance edition. German
Order number **MHW-WZ2R3-PEDE**

Z230 PE Management Workstation UK
Workstation performance edition. British English
Order number **MHW-WZ2R3-PEUK**

Z230 PE Management Workstation RU
Workstation performance edition. Russian
Order number **MHW-WZ2R3-PERU**

Accessories

Localization CH
Localization (Keyboard): Switzerland—French/German
Order number **MHW-AWLCK-SUI**

Localization CZ
Localization (Keyboard): Czech Republic—Czech
Order number **MHW-AWLCK-CZ**

Localization DK
Localization (Keyboard): Denmark—English
Order number **MHW-AWLCK-DK**

Localization ES
Localization (Keyboard): Spain—Spanish
Order number **MHW-AWLCK-ESP**

Localization FR
Localization (Keyboard): France—French
Order number **MHW-AWLCK-FR**

Localization IT
Localization (Keyboard): Italy—Italian
Order number **MHW-AWLCK-IT**

Localization NL
Localization (Keyboard): Netherlands—Dutch
Order number **MHW-AWLCK-NL**

Localization NO
Localization (Keyboard): Norway—Norwegian
Order number **MHW-AWLCK-NO**

Localization SV
Localization (Keyboard): Sweden—Swedish
Order number **MHW-AWLCK-SE**

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